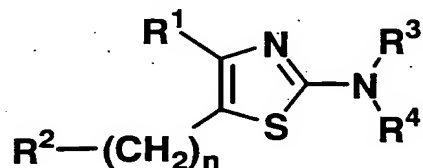


CLAIMS

1. An adenosine A_{2A} receptor antagonist comprising,
as the active ingredient, a thiazole derivative
5 represented by a general formula (I):



(I)

{wherein;

n represents an integer of from 0 to 3;

R¹ represents substituted or unsubstituted cycloalkyl,
10 substituted or unsubstituted aryl,
a substituted or unsubstituted alicyclic heterocyclic
group, or
a substituted or unsubstituted aromatic heterocyclic
group;

15 R² represents a halogen,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
20 substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic
group,
a substituted or unsubstituted aromatic heterocyclic
25 group,
substituted or unsubstituted alicyclic heterocyclic-

alkyl,

substituted or unsubstituted aromatic heterocyclic-
alkyl,

-NR⁵R⁶ (wherein

5 R⁵ and R⁶ may be the same or different, and each
represents

a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

10 substituted or unsubstituted lower alkynyl,

substituted or unsubstituted lower alkanoyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

15 a substituted or unsubstituted alicyclic
heterocyclic group,

a substituted or unsubstituted aromatic
heterocyclic group,

substituted or unsubstituted alicyclic

20 heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-
alkyl),

-OR⁷ (wherein

R⁷ represents a hydrogen atom,

25 substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkanoyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

30 a substituted or unsubstituted alicyclic

heterocyclic group,
a substituted or unsubstituted aromatic
heterocyclic group,
substituted or unsubstituted alicyclic
5 heterocyclic-alkyl, or
substituted or unsubstituted aromatic heterocyclic-
alkyl), or
-COR⁸ [wherein
R⁸ represents a hydrogen atom,
10 substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
15 substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic
heterocyclic group,
a substituted or unsubstituted aromatic
heterocyclic group,
20 substituted or unsubstituted alicyclic
heterocyclic-alkyl,
substituted or unsubstituted aromatic heterocyclic-
alkyl,
-NR⁹R¹⁰ (wherein
25 R⁹ and R¹⁰ may be the same or different, and each
represent
a hydrogen atom,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
30 substituted or unsubstituted lower alkynyl,

substituted or unsubstituted lower alkanoyl,
substituted or unsubstituted lower alkoxy,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
5 substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic
heterocyclic group,
a substituted or unsubstituted aromatic
heterocyclic group,
10 substituted or unsubstituted alicyclic
heterocyclic-alkyl, or
substituted or unsubstituted aromatic
heterocyclic-alkyl), or
-OR¹¹ (wherein
15 R¹¹ represents a hydrogen atom,
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
20 substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic
heterocyclic group,
a substituted or unsubstituted aromatic
25 heterocyclic group,
substituted or unsubstituted alicyclic
heterocyclic-alkyl, or
substituted or unsubstituted aromatic
heterocyclic-alkyl)]; and
30 R³ and R⁴ may be the same or different, and each

represents

a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

5 substituted or unsubstituted lower alkynyl,

substituted or unsubstituted aralkyl,

substituted or unsubstituted alicyclic heterocyclic-
alkyl,

10 substituted or unsubstituted aromatic heterocyclic-
alkyl,

-COR¹² [wherein

R¹² represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

15 substituted or unsubstituted lower alkynyl,

substituted or unsubstituted cycloalkyl,

substituted or unsubstituted aryl,

substituted or unsubstituted aralkyl,

20 a substituted or unsubstituted alicyclic
heterocyclic group,

a substituted or unsubstituted aromatic
heterocyclic group,

substituted or unsubstituted alicyclic
heterocyclic-alkyl,

25 substituted or unsubstituted aromatic heterocyclic-
alkyl,

-NR¹³R¹⁴ (wherein

R¹³ and R¹⁴ may be the same or different, and each
represents

30 a hydrogen atom,

substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted lower alkanoyl,
5 substituted or unsubstituted lower alkoxy,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic
10 heterocyclic group,
a substituted or unsubstituted aromatic
heterocyclic group,
substituted or unsubstituted alicyclic
heterocyclic-alkyl, or
15 substituted or unsubstituted aromatic
heterocyclic-alkyl), or
-OR¹⁵ (wherein
R¹⁵ represents a hydrogen atom,
substituted or unsubstituted lower alkyl,
20 substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
25 a substituted or unsubstituted alicyclic
heterocyclic group,
a substituted or unsubstituted aromatic
heterocyclic group,
substituted or unsubstituted alicyclic
30 heterocyclic-alkyl, or

substituted or unsubstituted aromatic
heterocyclic-alkyl)];

provided that,

when R¹ is substituted or unsubstituted phenyl and n is 0,

5 then R² is not substituted or unsubstituted 6-oxo-1,6-dihydropyridazin-3-yl},

or a pharmaceutically acceptable salt thereof.

2. The adenosine A_{2A} receptor antagonist according
10 to claim 1, wherein R¹ is substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group.

3. The adenosine A_{2A} receptor antagonist according
15 to claim 1 or 2, wherein n is 0.

4. The adenosine A_{2A} receptor antagonist according
to any one of claims 1 to 3, wherein R² is substituted or
unsubstituted lower alkyl, substituted or unsubstituted
20 aryl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, substituted or unsubstituted aromatic heterocyclic-alkyl, or -COR⁸ (wherein R⁸ has the
25 same meaning as defined above).

5. The adenosine A_{2A} receptor antagonist according
to any one of claims 1 to 3, wherein R² is substituted or
unsubstituted aryl.

30

6. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R² is a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

5

7. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 3, wherein R² is -COR⁸ (wherein R⁸ has the same meaning as defined above).

10

8. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R⁸ is a hydrogen atom, substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted lower alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

15

20

9. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R⁸ is substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

25

10. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 4 and 7, wherein R⁸ is

30

substituted or unsubstituted aryl, a substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group.

5 11. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R³ is a hydrogen atom.

10 12. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R³ is lower alkyl or aralkyl.

15 13. The adenosine A_{2A} receptor antagonist according to claim 11 or 12, wherein R⁴ is -COR¹² (wherein R¹² has the same meaning as defined above).

20 14. The adenosine A_{2A} receptor antagonist according to claim 11 or 12, wherein R⁴ is -COR^{12a} (wherein R^{12a} is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or
25 unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl).

30 15. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10, wherein R³ and R⁴ may be the same or different, and each represents -COR¹² (wherein R¹²

has the same meaning as defined above).

16. The adenosine A_{2A} receptor antagonist according to claim 1, wherein n is 0; R¹ is a substituted or unsubstituted 5-membered aromatic heterocyclic group containing at least one oxygen atom; and R² is -COR^{8a} (wherein R^{8a} represents a substituted or unsubstituted alicyclic heterocyclic group).

10 17. The adenosine A_{2A} receptor antagonist according to claim 16, wherein R¹ is substituted or unsubstituted furyl.

15 18. The adenosine A_{2A} receptor antagonist according to claim 16 or 17, wherein R^{8a} is a substituted or unsubstituted alicyclic heterocyclic group containing at least one oxygen atom.

20 19. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10 and 16 to 18, wherein R³ is a hydrogen atom; and R⁴ is substituted or unsubstituted lower alkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

25 20. The adenosine A_{2A} receptor antagonist according to any one of claims 1 to 10 and 16 to 18, wherein R³ is a hydrogen atom,; and R⁴ is lower alkyl, aralkyl, or aromatic heterocyclic-alkyl.

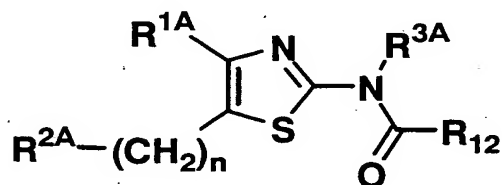
30 21. The adenosine A_{2A} receptor antagonist according

to any one of claims 1 to 10 and 16 to 18, wherein R³ and R⁴ may be the same or different, and each represents substituted or unsubstituted lower alkyl, substituted or unsubstituted aralkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl.

22. An agent for treating and/or preventing diseases associated with adenosine A_{2A} receptor comprising, as the active ingredient, a thiazole derivative according to any one of claims 1 to 21, or a pharmaceutically acceptable salt thereof.

23. The agent for treating and/or preventing according to claim 22, wherein the disease associated with adenosine A_{2A} receptor is Parkinson's disease.

24. A thiazole derivative represented by a formula (IA):



(IA)

[wherein

R^{1A} represents a substituted or unsubstituted 5-membered aromatic heterocyclic group containing at least one oxygen atom (excluding a group selected from 5-phosphonofuran-2-yl and 5-nitrofuran-2-yl);

R¹² and n have the same meanings as defined above, respectively;

R^{3A} represents a hydrogen atom;
substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
5 substituted or unsubstituted aralkyl,
substituted or unsubstituted alicyclic heterocyclic-
alkyl,
substituted or unsubstituted aromatic heterocyclic-
alkyl, or
10 $-COR^{12A}$ (wherein R^{12A} have the same meaning as that of
 R^{12}); and
 R^{2A} represents substituted or unsubstituted lower alkyl,
substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
15 substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,
a substituted or unsubstituted alicyclic heterocyclic
group,
20 a substituted or unsubstituted aromatic heterocyclic
group (excluding 2-furyl),
substituted or unsubstituted alicyclic heterocyclic-
alkyl,
substituted or unsubstituted aromatic heterocyclic-
25 alkyl,
 $-NR^5R^6$ (wherein R^5 and R^6 have the same meanings as
defined above, respectively),
 $-OR^7$ (wherein R^7 has the same meaning as defined above),
or
30 $-COR^8$ (wherein R^8 has the same meaning as defined

above)],
or a pharmaceutically acceptable salt thereof.

25. The thiazole derivative according to claim 24,
5 wherein R^{1A} is substituted or unsubstituted furyl, or a
pharmaceutically acceptable salt thereof.

26. The thiazole derivative according to claim 24
or 25, wherein n is 0, or a pharmaceutically acceptable
10 salt thereof.

27. The thiazole derivative according to any one of
claims 24 to 26, wherein R^{2A} is substituted or
unsubstituted lower alkyl, substituted or unsubstituted
15 aryl, a substituted or unsubstituted alicyclic
heterocyclic group, a substituted or unsubstituted
aromatic heterocyclic group, substituted or unsubstituted
alicyclic heterocyclic-alkyl, substituted or unsubstituted
aromatic heterocyclic-alkyl, or -COR⁸ (wherein R⁸ has the
20 same meaning as defined above), or a pharmaceutically
acceptable salt thereof.

28. The thiazole derivative according to any one of
claims 24 to 26, wherein R^{2A} is substituted or
25 unsubstituted aryl, or a pharmaceutically acceptable salt
thereof.

29. The thiazole derivative according to any one of
claims 24 to 26, wherein R^{2A} is a substituted or
30 unsubstituted alicyclic heterocyclic group, or a

substituted or unsubstituted aromatic heterocyclic group,
or a pharmaceutically acceptable salt thereof.

30. The thiazole derivative according to any one of
5 claims 24 to 26, wherein R^{2A} is $-COR^8$ (wherein R^8 has the
same meaning as defined above), or a pharmaceutically
acceptable salt thereof.

31. The thiazole derivative according to claim 30,
10 wherein R^8 is a hydrogen atom, substituted or
unsubstituted lower alkyl, substituted or unsubstituted
lower alkenyl, substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl, substituted or
unsubstituted aryl, substituted or unsubstituted aralkyl,
15 a substituted or unsubstituted alicyclic heterocyclic
group, a substituted or unsubstituted aromatic
heterocyclic group, substituted or unsubstituted alicyclic
heterocyclic-alkyl, or substituted or unsubstituted
aromatic heterocyclic-alkyl, or a pharmaceutically
20 acceptable salt thereof.

32. The thiazole derivative according to claim 30,
wherein R^8 is substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl, a substituted or
25 unsubstituted alicyclic heterocyclic group, or a
substituted or unsubstituted aromatic heterocyclic group,
or a pharmaceutically acceptable salt thereof.

33. The thiazole derivative according to claim 30,
30 wherein R^8 is substituted or unsubstituted aryl, a

substituted or unsubstituted alicyclic heterocyclic group, or a substituted or unsubstituted aromatic heterocyclic group, or a pharmaceutically acceptable salt thereof.

5 34. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is a hydrogen atom, or a pharmaceutically acceptable salt thereof.

10 35. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is lower alkyl or aralkyl, or a pharmaceutically acceptable salt thereof.

15 36. The thiazole derivative according to any one of claims 24 to 33, wherein R^{3A} is $-\text{COR}^{12A}$ (wherein R^{12A} has the same meaning as defined above), or a pharmaceutically acceptable salt thereof.

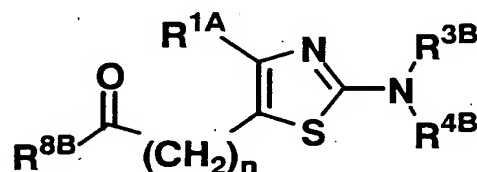
20 37. The thiazole derivative according to claim 36, wherein R^{12A} is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, 25 substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl, or a pharmaceutically acceptable salt thereof.

30 38. The thiazole derivative according to any one of claims 24 to 37, wherein R^{12} is substituted or

unsubstituted lower alkyl, substituted or unsubstituted lower alkoxy, substituted or unsubstituted cycloalkyl, substituted or unsubstituted aryl, substituted or unsubstituted aralkyl, a substituted or unsubstituted alicyclic heterocyclic group, a substituted or unsubstituted aromatic heterocyclic group, substituted or unsubstituted alicyclic heterocyclic-alkyl, or substituted or unsubstituted aromatic heterocyclic-alkyl, or a pharmaceutically acceptable salt thereof.

10

39. A thiazole derivatives represented by a formula (IB):



(IB)

(wherein

15 n and R^{1A} have the same meanings as defined above, respectively;

R^{3B} represents a hydrogen atom,

substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,

20 substituted or unsubstituted lower alkynyl,

substituted or unsubstituted aralkyl,

substituted or unsubstituted alicyclic heterocyclic-alkyl, or

substituted or unsubstituted aromatic heterocyclic-alkyl;

25

R^{4B} represents substituted or unsubstituted lower alkyl,

substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted aralkyl,
substituted or unsubstituted alicyclic heterocyclic-
5 alkyl, or
substituted or unsubstituted aromatic heterocyclic-
alkyl; and

R^{8B} represents a hydrogen atom,

substituted or unsubstituted lower alkyl,
10 substituted or unsubstituted lower alkenyl,
substituted or unsubstituted lower alkynyl,
substituted or unsubstituted cycloalkyl,
substituted or unsubstituted aryl,
substituted or unsubstituted aralkyl,

15 a substituted or unsubstituted alicyclic heterocyclic
group,

a substituted or unsubstituted aromatic heterocyclic
group,

substituted or unsubstituted alicyclic heterocyclic-
20 alkyl, or

substituted or unsubstituted aromatic heterocyclic-
alkyl),

or a pharmaceutically acceptable salt thereof.

25 40. The thiazole derivative according to claim 39,
wherein R^{1A} is substituted or unsubstituted furyl, or a
pharmaceutically acceptable salt thereof.

41. The thiazole derivative according to claim 39
30 or 40, wherein n is 0, or a pharmaceutically acceptable

salt thereof.

42. The thiazole derivative according to any one of claims 39 to 41, wherein R^{8B} is a substituted or unsubstituted alicyclic heterocyclic group containing at least one oxygen atom, or a pharmaceutically acceptable salt thereof.

43. The thiazole derivative according to any one of claims 39 to 42, wherein R^{3B} is a hydrogen atom, or a pharmaceutically acceptable salt thereof.

44. The thiazole derivative according to claim 43, wherein R^{4B} is lower alkyl, aralkyl or aromatic heterocyclic-aralkyl, or a pharmaceutically acceptable salt thereof.

45. A pharmaceutical composition comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

46. An adenosine A_{2A} receptor antagonist comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

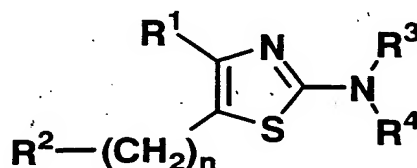
47. An agent for treating and/or preventing diseases associated with adenosine A_{2A} receptor comprising, as the active ingredient, a thiazole derivative according

to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

48. An agent for treating and/or preventing central nervous system diseases comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

49. An agent for treating and/or preventing Parkinson's disease comprising, as the active ingredient, a thiazole derivative according to any one of claims 24 to 44, or a pharmaceutically acceptable salt thereof.

50. A method for treating and/or preventing diseases associated with adenosine A_{2A} receptor, which comprises administering an effective amount of a thiazole derivative represented by a general formula (I):



(I)

(wherein n, R¹, R², R³ and R⁴ have the same meanings as defined above, respectively), or a pharmaceutically acceptable salt thereof.